

CLAIMS

What is claimed is:

1. A robot cleaner comprising:
a cleaning unit on the robot cleaner, the cleaning unit including a cleaning pad;
and
a processor to control the robot cleaner to use the cleaning unit to clean a room,
the cleaning pad contacting the floor to clean the floor surface.
2. The robot cleaner of claim 1, wherein the cleaning unit also includes a cleaning solution dispenser.
3. The robot cleaner of claim 2, wherein the robot cleaner wipes up cleaning solution from the cleaning solution dispenser with the cleaning pad.
4. The robot cleaner of claim 2, wherein the processor determines when to dispense cleaning solution.
5. The robot cleaner of claim 2, wherein the robot cleaner detects whether the floor surface is a hard surface before dispensing the cleaning solution.
6. The robot cleaner of claim 2, wherein a user controls the dispensing the cleaning solution.
7. The robot cleaner of claim 2, wherein a user controls the dispensing the cleaning solution.
8. The robot cleaner of claim of claim 1, wherein the cleaning unit includes a positioning device to position the cleaning pad up off of the floor or down contacting the floor.

9. The robot cleaner of claim 1, wherein the robot cleaner includes a floor type detector.
10. The robot cleaner of claim 9, wherein the floor type detector is an optical detector.
11. The robot cleaner of claim 9, wherein the floor type detector is an ultrasound detector.
12. The robot cleaner of claim 9, wherein the floor type detector is a mechanical detector.
13. The robot cleaner of claim 1, wherein the contact pad uses static electricity to attract dust.
14. A method of operating a robot cleaner comprising:
contacting a floor with a cleaning pad of a cleaning unit on a robot cleaner; and
controlling the robot cleaner to use the cleaning unit to clean a room, the cleaning pad contacting the floor to clean the floor.
15. The method of claim 14, wherein the cleaning unit also includes a cleaning solution dispenser.
16. The method of claim 15, wherein the robot cleaner wipes up cleaning solution from the cleaning solution dispenser with the cleaning pad.
17. The method of claim 15, wherein the processor determines when to dispense cleaning solution.
18. The method of claim 15, wherein the robot cleaner detects whether the floor surface is a hard surface before dispensing the cleaning solution.

19. The method of claim 15, wherein a user controls the dispensing the cleaning solution.
20. The method of claim 15, wherein a user controls the dispensing the cleaning solution.
21. The method of claim of claim 14, wherein the cleaning unit includes a positioning device to position the cleaning pad up off of the floor or down contacting the floor.
22. The method of claim 14, wherein the robot cleaner includes a floor type detector.
23. The method of claim 22, wherein the floor type detector is an optical detector.
24. The method of claim 22, wherein the floor type detector is an ultrasound detector.
25. The method of claim 22, wherein the floor type detector is a mechanical detector.
26. The method of claim 14, wherein the contact pad uses static electricity to attract dust.
27. A robot cleaner comprising:
 - a cleaning unit on the robot cleaner,
 - a germicidal ultraviolet lamp to emit radiation upon being energized; and
 - a processor to control the robot cleaner to use the cleaning unit to clean a room
28. The robot cleaner of claim 27, wherein the germicidal ultraviolet lamp is positioned to irradiate an internal cavity of the robot cleaner.
29. The robot cleaner of claim 27, wherein the germicidal ultraviolet lamp is positioned to irradiate a floor.

30. The robot cleaner of claim 27, wherein the cleaning unit includes an electrostatic filter.
31. The robot cleaner of claim 30, wherein the germicidal ultraviolet lamp is positioned to irradiate an airflow before the electrostatic filter.
32. The robot cleaner of claim 30, wherein the cleaning unit further includes a mechanical filter.
33. The robot cleaner of claim 32, wherein the mechanical filter is a vacuum cleaner bag.
34. The robot cleaner of claim 27, wherein the robot cleaner is configured to preclude human viewing of radiation emitted directly from the germicidal ultraviolet lamp.
35. The robot cleaner of claim 27, wherein the cleaning unit includes a vacuum.
36. The robot cleaner of claim 27, wherein the cleaning unit includes a sweeper.
37. The robot cleaner of claim 27, wherein portions of the robot cleaner irradiated by the germicidal ultraviolet lamp are made of a UV resistant material.
38. The robot cleaner of claim 27, wherein the UV resistant material is a UV resistant plastic material.
39. A method comprising:
controlling a robot cleaner to use a cleaning unit to clean a room; and
using a germicidal ultraviolet lamp on the robot cleaner to emit radiation.
40. The method of claim 39, wherein the germicidal ultraviolet lamp is positioned to irradiate an internal cavity of the robot cleaner.

41. The method of claim 39, wherein the germicidal ultraviolet lamp is positioned to irradiate a floor.
42. The method of claim 39, wherein the cleaning unit includes an electrostatic filter.
43. The method of claim 42, wherein the germicidal ultraviolet lamp is positioned to irradiate an airflow before the electrostatic filter.
44. The method of claim 42, wherein the cleaning unit further includes a mechanical filter.
45. The method of claim 44, wherein the mechanical filter is a vacuum cleaner bag.
46. The method of claim 39, wherein the robot cleaner is configured to preclude human viewing of radiation emitted directly from the germicidal ultraviolet lamp.
47. The method of claim 39, wherein the cleaning unit includes a vacuum.
48. The method of claim 39, wherein the cleaning unit includes a sweeper.
49. The method of claim 39, wherein portions of the robot cleaner irradiated by the germicidal ultraviolet lamp are made of a UV resistant material.
50. The method of claim 39, wherein the UV resistant material is a UV resistant plastic material.